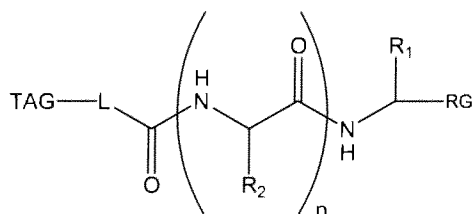


**Amendments to the Claims/Listing of Claims**

Please cancel claims 1-19 without prejudice, and add claims 20-30 as follows. This listing of claims will replace all prior versions, and listings, of claims in the application.

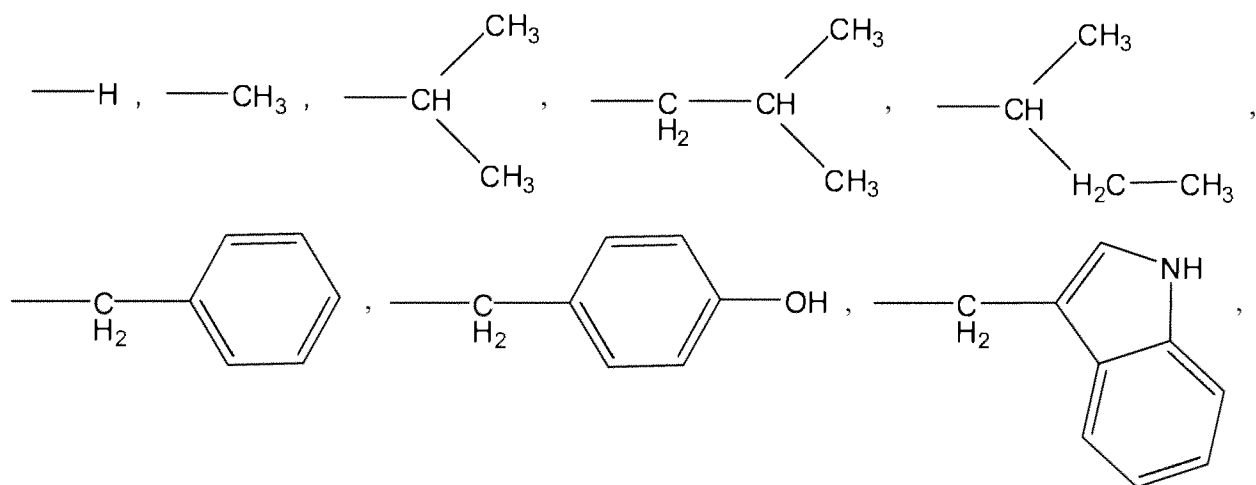
1. – 19. (Canceled)

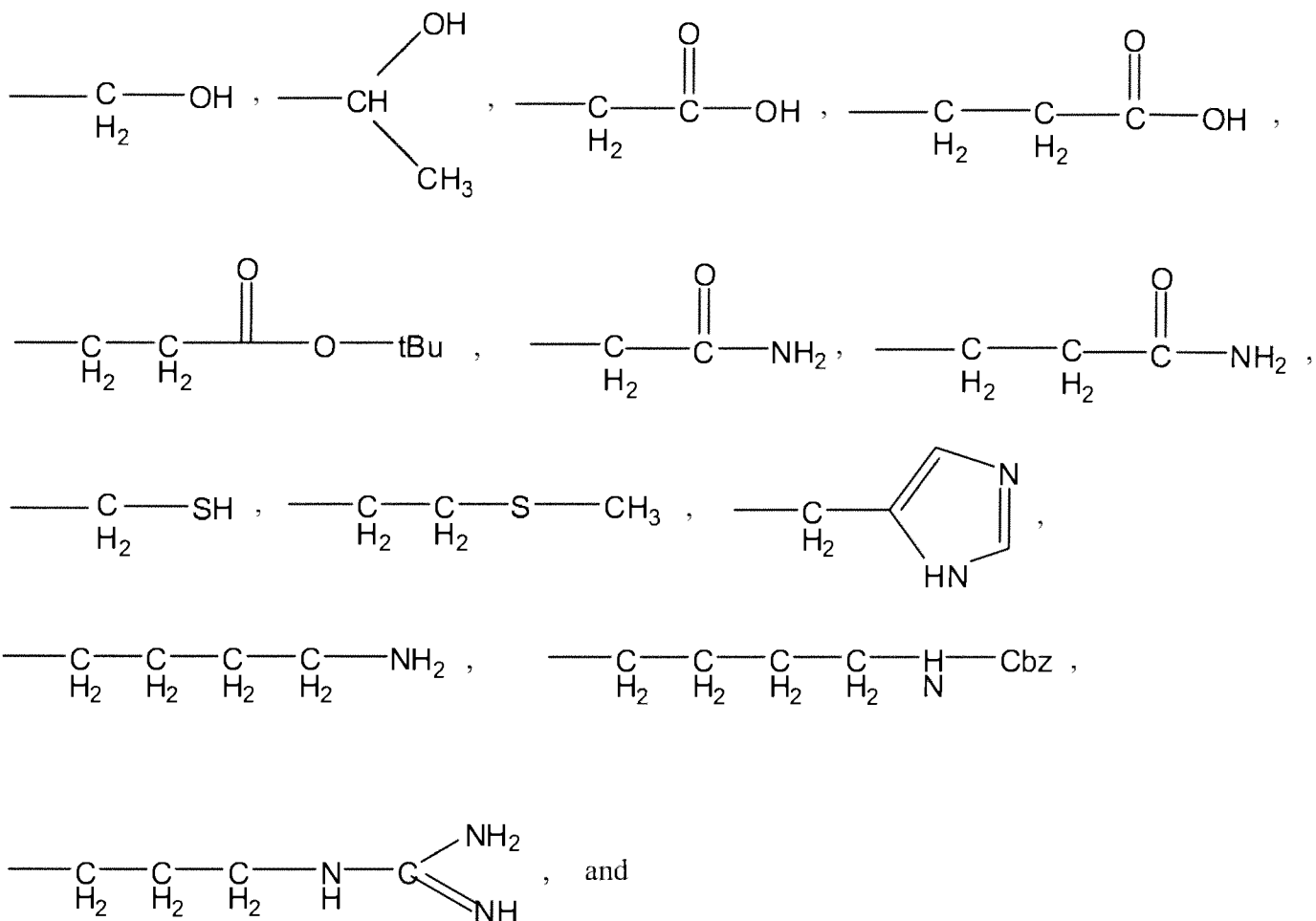
20. (New) An activity based probe (ABP) having the structure,



wherein

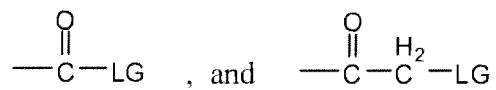
each  $R_1$  and  $R_2$  is independently selected from the group consisting of:



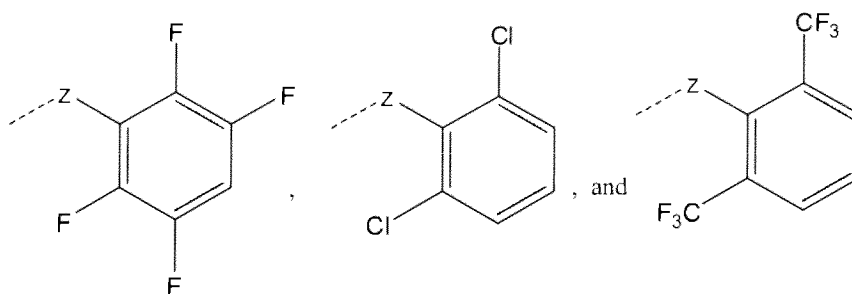


R<sub>1</sub> and/or R<sub>2</sub> is -CH<sub>2</sub>-CH<sub>2</sub>-CH<sub>2</sub>-, such that R<sub>1</sub> and/or R<sub>2</sub>, along with the -NH- adjacent thereto, forms a pyrrolidine ring;

RG is selected from the group consisting of



wherein LG is selected from the group consisting of



wherein Z is  $-O-$  or  $-O-C(O)-$ ;

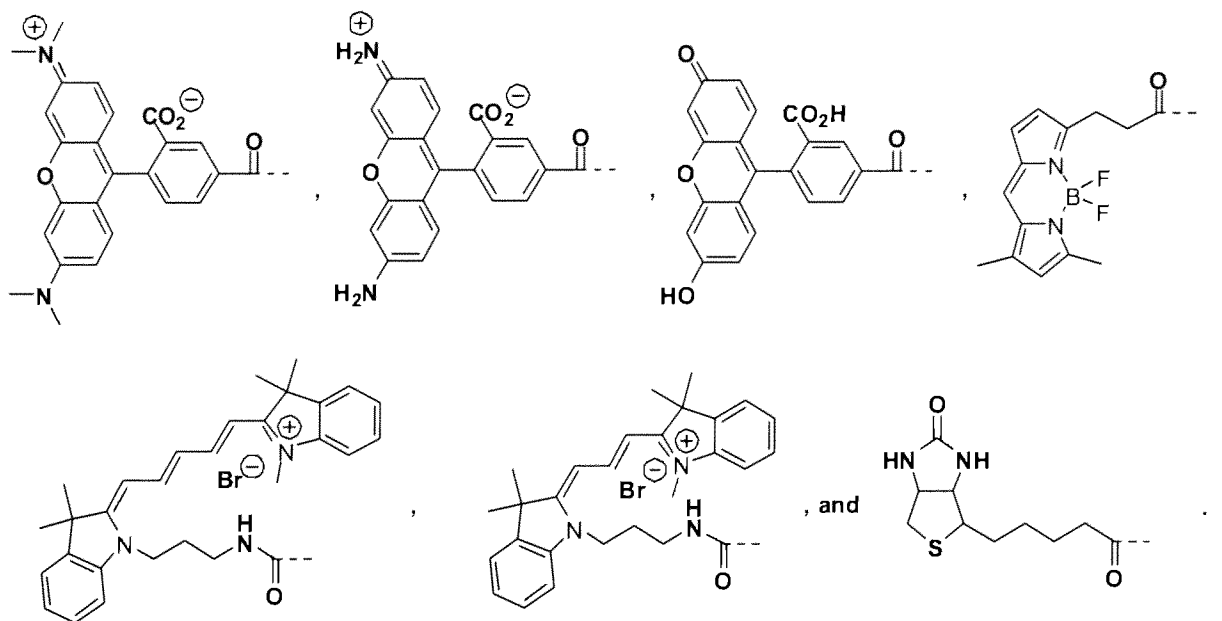
L is optionally present and is an alkyl or heteroalkyl group of 1-20 backbone atoms selected from the group consisting of:  $-N(R)-$ ,  $-O-$ ,  $-S-$  or  $-C(R)(R)-$ , where each R is independently H or a  $-C_{1-6}$  alkyl straight or branched chain;

TAG is a detectable label selected from the group consisting of fluorescent moieties, electrochemical labels, biotin, digoxigenin, maltose, oligohistidine, 2,4-dinitrobenzene, phenylarsenate, ssDNA, dsDNA, a polypeptide, a metal chelate, a saccharide, dethiobiotin or structurally modified biotin-based reagents which bind to proteins of the avidin/streptavidin family; vicinal diols; maltose which binds to maltose binding protein, as well as any other sugar/sugar binding protein pair; a hapten to which an antibody can be generated; a tag which binds to a transition metal such that the transition metal capture reagent may be used in the form of a resin bound chelated transition metal; and glutathione; and

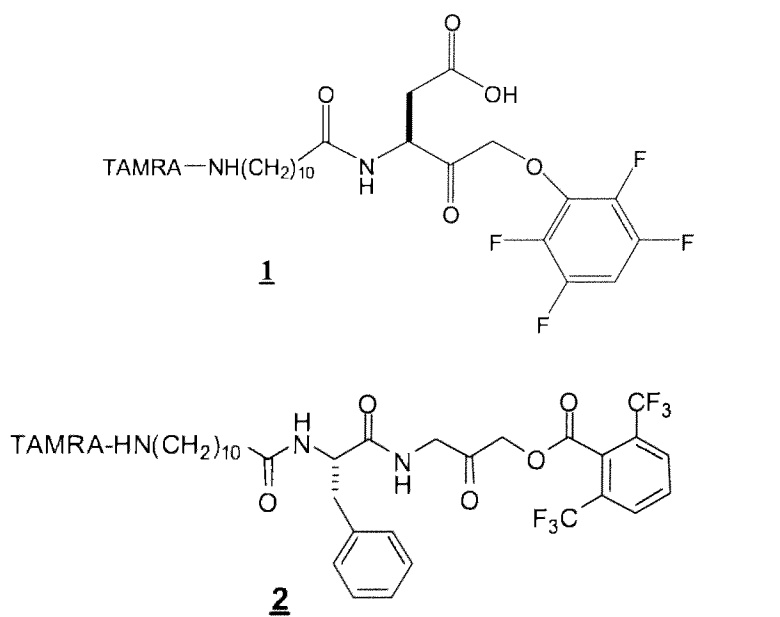
n is an integer from 0 to 4;

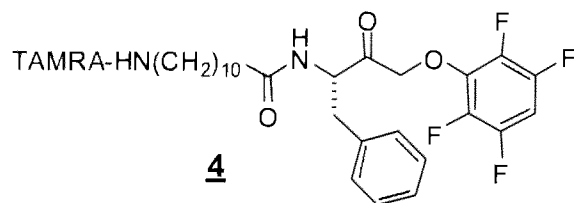
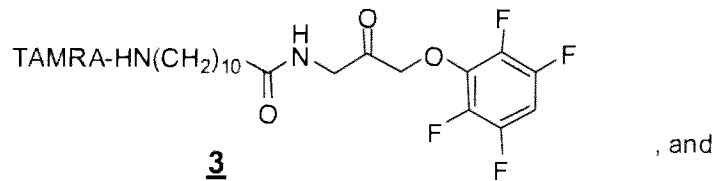
or a pharmaceutically acceptable salt or complex thereof.

21. (New; withdrawn) An activity based probe of claim 20 wherein n is 0 or 1.
22. (New; withdrawn) An activity based probe of claim 20 wherein TAG is selected from the group consisting of:

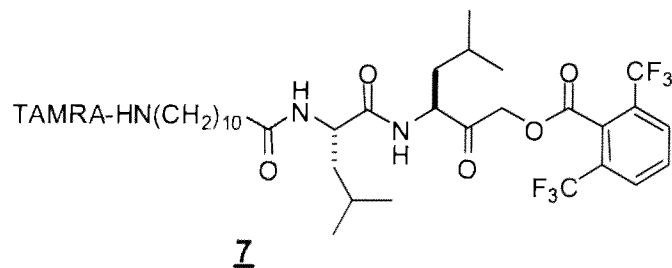
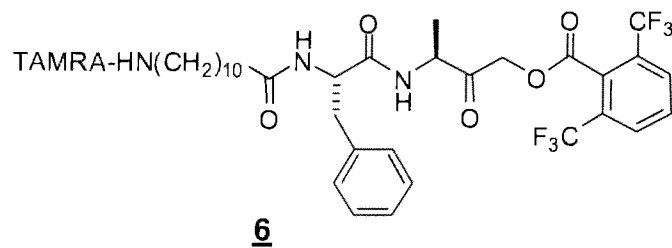
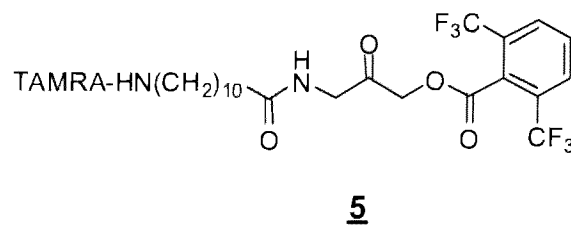


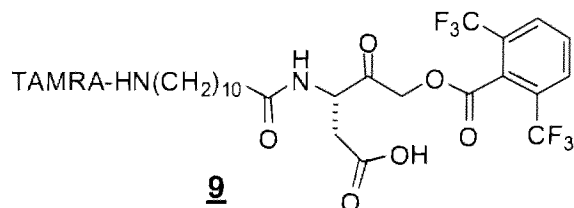
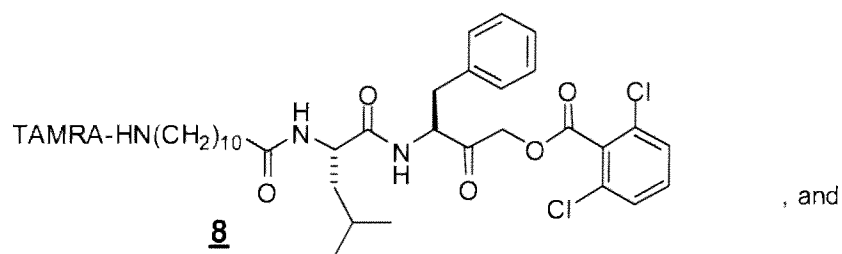
23. (New) An activity based probe having a structure selected from the group consisting of:





24. (New) An activity based probe having a structure selected from the group consisting of:





25. (New; withdrawn) An activity based probe library comprising a plurality of activity based probe(s) of claim 20.

26. (New; withdrawn) An activity based probe library comprising a plurality of activity based probe(s) of claim 21.

27. (New; withdrawn) An activity based probe library comprising a plurality of activity based probe(s) of claim 22.

28. (New; withdrawn) An activity based probe library comprising a plurality of activity based probe(s) of claim 23.

29. (New; withdrawn) An activity based probe library comprising a plurality of activity based probe(s) of claim 24.

30. (New) An activity based probe having a structure selected from the group consisting of (wherein Z at each occurrence refers to  $-\text{C}(\text{O})-\text{O}-\text{CH}_2\text{-phenyl}$ ):

